



## Instructions

### Thermal Rack Installation for PIPETMAX® 268

This document provides installation instructions for passive temperature (PT) and circulating temperature (CT) thermal racks on a standard PIPETMAX tray.

Figure 1: PT Rack

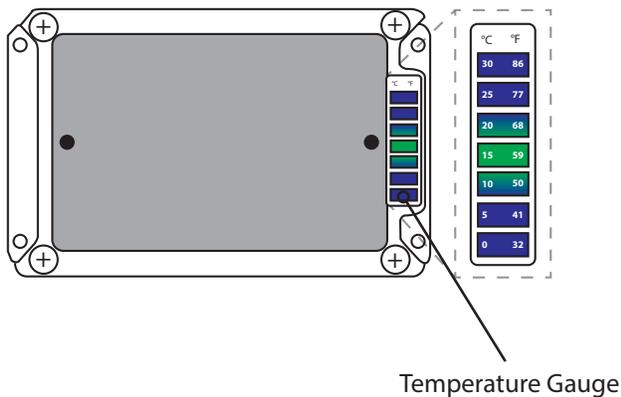
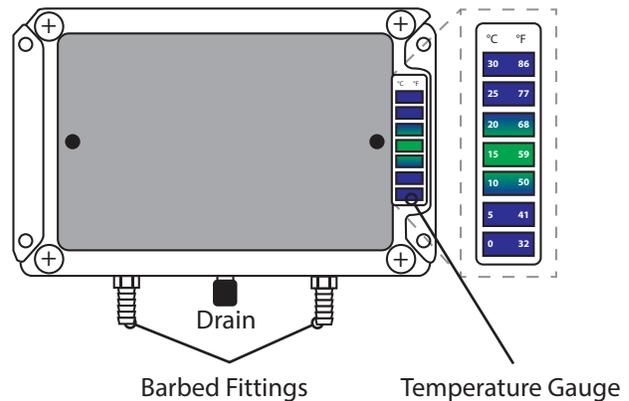


Figure 2: CT Rack



### Placing PT Racks in Tip Rack Positions

PT racks can be placed at any position on a standard PIPETMAX tray except for the back left position, which is reserved for tip disposal. When placing the thermal racks in positions reserved for tip racks (positions A, B, or C), follow the steps below. Placing CT or PT racks on top of thumb screws will alter the Z-height and may interfere with the pipette head.

1. Remove the thumb screws and clips (e.g. D) from the desired position. Store these thumb screws and clips for future use.

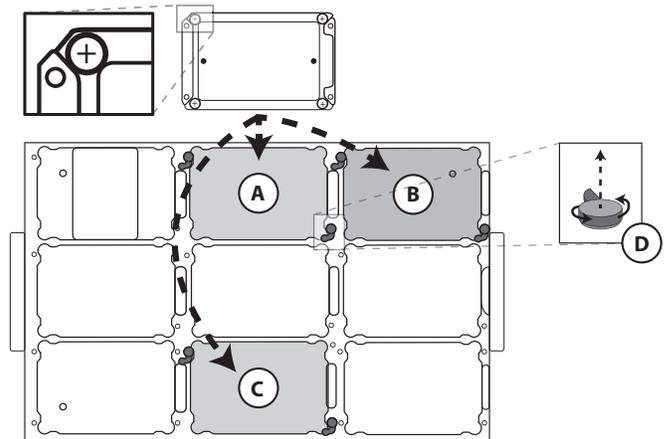


Figure 3: Placing the PT Rack





2. Place the PT rack. Ensure that the beveled edge of the rack faces the back left corner of the tray position.

a. If placing the PT rack in position A, loosen the thumb screw (D) then rotate the clip in the back left quadrant of position B 180 degrees (E) to prevent interference with the PT rack. Ensure that the beveled edge of the rack faces the back left corner of the tray position.

b. Tighten the thumb screw to secure the clip.

## Placing, Installing, and Plumbing CT Racks

Use of the CT racks requires a PIPETMAX cover with cutouts (part number 32000180). Please contact your local Gilson representative if you need to change the cover.

1. Install the cable guide plate (part number 32000247).



It is recommended that two people install the cable guide plate. One person should lift the PIPETMAX while the other slides the plate in place.

2. Grip PIPETMAX at the front recess and then lift.
3. Slide the cable guide plate in place, ensuring that the circular cutouts fit beneath the front feet on the PIPETMAX.
4. Locate the cable guide assembly (part number 32000193), which includes a CT rack adapter secured to the cable guide.
5. Unsnap and separate the cable guide cover and set it aside.

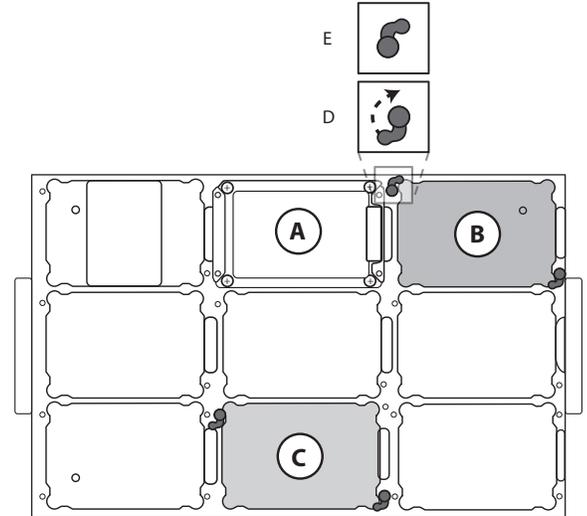


Figure 4: Loosening Thumb Screws on the Tray

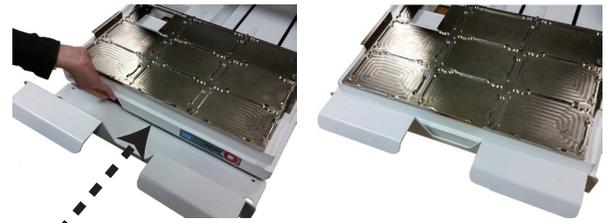


Figure 5: Inserting the Cable Guide Plate



6. Place the CT rack adapter with attached cable guide at the front left position (D) or front right position (E) on the PIPETMAX tray.

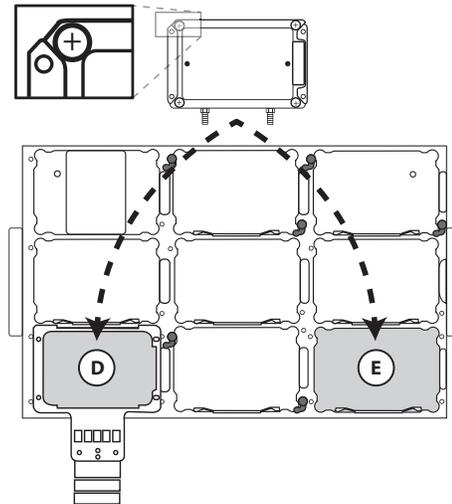


Figure 6: Placing the CT Rack Adapter

7. Set the CT rack on the CT rack adapter. Ensure that the beveled edge of the rack faces the back left corner of the tray position. The four socket head cap (SHC) screws will need to be aligned with the holes in the PIPETMAX tray before you can tighten the screws.
8. Tighten the SHC screws with a 3 mm Allen wrench.
9. Insert the two locator pins into the holes as shown in the image on the right. Locator pins are used to ensure the proper alignment of adapters placed on top of the CT rack.

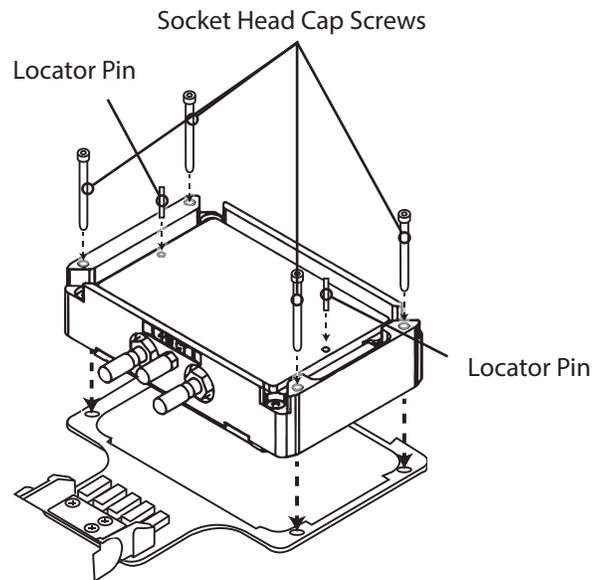


Figure 7: Positioning the CT Rack on the Adapter



10. Retract the mesh covering the Tygon® tubing (part number 32000289) to expose the cable ties attached to the ends of the tubing. Follow the steps below, but only attach one of the two pieces of tubing at a time for ease of installation.
11. Attach the Tygon® tubing to the barbed fitting on the CT rack. Ensure that the tubing is fully seated onto the barbed fitting.
12. Secure the tubing to the barbed fitting by pulling the cable tie tight. Cut the excess plastic off the cable tie with a pair of scissors. Fully cover the tubing with the mesh.
13. Attach the other end of the Tygon® tubing to the circulator and repeat Steps 11 through 12, using appropriate fittings for the circulator. Excess condensation can be diverted away from the CT rack via the drain fitting (tubing not supplied).
14. Repeat Steps 10 through 13 to attach the other piece of tubing.
15. Turn on the circulator and check the tubing for leaks.
16. Ensure that the path between the PIPETMAX and the circulator is unobstructed. Make sure there is enough slack to allow the PIPETMAX tray to move back and forth without pulling or kinking the cable guide and tubing.
17. Reconnect the cable guide cover removed in Step 5 to the cable guide base to contain the tubing as shown in Figure 9.

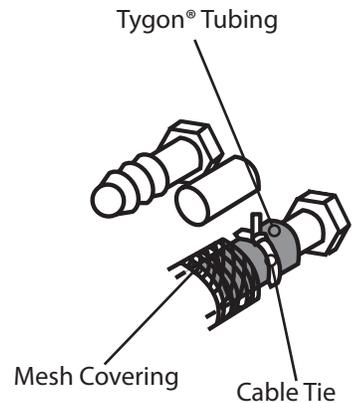


Figure 8: Attaching the Tubing

## Technical Specifications for CT Racks

**Maximum Operating Pressure:** 11 psi (0.75 bar)

**Operating Temperature Range:** -1 to 40° C (30 to 104° F)

## Materials

**Tubing:** Tygon® R-3400

**Barbed Fittings:** Brass

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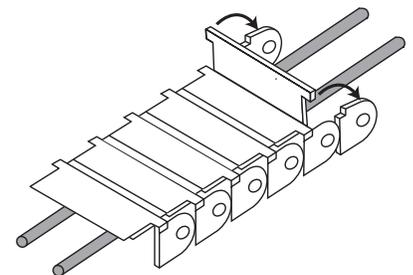


Figure 9: Cable Guide Cover